

WATER QUALITY M E M O R A N D U M

Utah Coal Regulatory Program

September 27, 2006

OK

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor *DWH*

FROM: Steve Fluke, Reclamation Hydrogeologist *SVF*

RE: 2006 First Quarter Water Monitoring, Canyon Fuel Company,
SUFCO Mine, C/041/0002-WQ06-1, Task ID #2437

1. Was data submitted for all required monitoring sites?

YES [X] NO []

The SUFCO Mine is currently operational. Water monitoring data is evaluated from the data that is submitted quarterly by the mine to the Division EDI database. The water monitoring program, field and laboratory measurement protocols, and groundwater and surface water operational water quality parameters are outlined in the mine's MRP in Tables 7-2, 7-3, 7-4, and 7-5, respectively. Quarterly groundwater monitoring for the SUFCO Mine is required for three quarters only (second, third, and fourth quarters). UPDES reporting requirements are presented in Appendix 7-7 of the MRP.

Additional water monitoring is being conducted as part of the East Fork of Box Canyon monitoring and mitigation plan outlined in Appendix 3-10 of the MRP. This monitoring data is being submitted and reviewed separately from the EDI database monitoring data, although there is some overlap.

Surface *Operational sampling is required quarterly for fifteen stream monitoring sites. Two stream monitoring sites (Pines 407 and 408) are equipped with pressure transducers because monthly monitoring is required July through October each year. Two stream monitoring sites (FP-1 and FP-2) require the identification of the perennial portion of stream on or near October 1 of each year. For Pines 407, Pines 408, FP-1, FP-2, USFS-109, and Pines 106, flow data, perennial stream flow maps, and the results of weather data/flow data comparison will be submitted with the fourth quarter monitoring report each year.*

No surface monitoring is required for the first quarter.

Groundwater and Wells *Operational sampling is required quarterly for seventeen spring monitoring sites and eleven groundwater monitoring well sites including the five waste rock disposal site (WRDS) wells. In addition, operational sampling is required yearly for two additional groundwater monitoring wells.*

No groundwater or well monitoring is required for the first quarter.

UPDES *Operational sampling is required monthly for three active UPDES sites (UT002198-001, -002, and -003A).*

All UPDES sites were sampled and data submitted for the 2006 first quarter monitoring.

2. Were all required parameters reported for each site? YES [X] NO []

Surface NA

Groundwater and Wells NA

UPDES All required parameters were reported.

3. Were any irregularities found in the data? YES [X] NO []

Surface NA

Groundwater and Wells NA

UPDES **Outfall 002** – A sample collected on February 22 exceeded the 2,000 lb per day average for total dissolved solids (TDS). Jeff Studenka (DWQ) contacted SUFCO of the violation when the DMRs were submitted to DWQ. According to Mr. Studenka, SUFCO misunderstood their UPDES permit and believed that they were permitted to exceed all parameter limitations except for total settleable solids and pH during precipitation events (including snowmelt periods). SUFCO was informed that the permit refers only to total suspended solids limitations being replaced by total settleable solids during precipitation events. SUFCO committed to managing their sediment pond outfall to keep TDS below the 2000 lb per day limit in the future.

4. On what date does the MRP require a five-year resampling of baseline water data?

The MRP does not require a five-year resampling of baseline water data.

5. Based on your review, what further actions, if any, do you recommend?

Surface Continue monitoring stream stations in the East Fork of Box Canyon for trends of diminished water quality and flow. The undermining of the stream had created fractures in the stream channel that interrupted surface flow until repairs were made in the fall of 2004. Flow has since resumed to historic flow amounts. Determine why the weather data/flow data comparison required with the fourth quarter monitoring report was not submitted.

Groundwater and Wells Continue monitoring springs in the East Fork of Box Canyon. Flow from Pines 214 has significantly diminished and two pairs of twin springs (EFB-12 and EFB-13) have ceased flowing based on additional monitoring data from the EFB monitoring and mitigation plan. These impacts are not unexpected, and the effects on natural habitat will be monitored to determine if mitigation is necessary.

UPDES No further action is recommended.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES [] NO [X]

7. Follow-up from last quarter, if necessary. Did the Mine Operator submit or provide an explanation for missing and/or irregular data?

Not applicable.